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ABSTRACT

The report summarizes five Colorado teacher research projects in teaching students with disabilities. The five projects described demonstrate that teacher initiated classroom based research allows educators to develop innovative approaches to instruction and to analyze their results in an objective way. The following projects are presented: (1) "Using Classic Literature with a Controlled Vocabulary To Improve Students' Ability To Recognize Frequency Words" (Randee Bergen); (2) "B.U.I.L.D.: Better Understanding and Interest in Learning Disabilities: Parent Support Group" (Robin Bruce, Reddy Gentry, Frances Hopp, and Beverly Temple); (3) "Increasing Reading, Language, Math, and Writing Skills through Hands-on Science" (Judy Bulmer); (4) "STAND BY THE BEST: Use of Multimedia Portfolio as Assessment of Content and Transition Skills" (Joyce Fuller, Stan Jozsiak, DeAnna Wesley, Mike Stanley, Patty Smith); and (5) "Expository Writing Curriculum for Students with Learning Disabilities" (Tracy Zimmerman, Rona Finnin, Marcia Reaksecker). Each project summary includes most of the following: title, researcher(s), school, statement of problem, objective, population, assessment, procedure, evaluation, findings, implications, and references. An attachment to the fifth project provides tables comparing regular and special students results in tests of written language. A grant application form is appended. (MAH)

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Research in the Classsroom

Ninth Annual Report

of

Research Projects

Conducted by Educators in Their Classrooms

1994 - 1995

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February 1996

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Research in the Classroom

Ninth Annual Report
of
Research Projects
Conducted by Educators in Their Classrooms
1994-95

Sponsored by the
Colorado Council for Learning Disabilities (CCLD)
and the
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Introduction

The Colorado Council for Learning Disabilities Research Committee is proud to present the Ninth Annual Report of Research Projects Conducted by Colorado Educators in Their Classrooms so aptly titled ***Research in the Classroom.***

We are so pleased because over the past nine years nearly 70 classroom projects that contribute important information to the knowledge base of special educators everywhere have been funded through our efforts. The proposals that we receive and the classroom research projects that are conducted continue to improve in quality as educators become more adept at producing good quality research. Project funding typically ranges from $200 - $500.

Special Awards

In 1989, two special awards were established to honor colleagues who have contributed substantially to the field of learning disabilities and to the dream of teachers-as-researchers. These awards were in memory of Audrey Eicher and Jeanne Hughes. In 1991, the Ellie Smucker Memorial Fund was established by her family. This fund honors the important work that Ellie did in the Colorado Council for Learning Disabilities and her dedication to the professionalism of teachers. Each year the research committee identifies the most outstanding proposal to receive the Ellie Smucker award. This year, the Ellie Smucker award was granted to Joye Fuller from Fairview High School in Boulder. Her research project, "Stand by the Best: Use of Multimedia Portfolio as Assessment of Content and Transition Skills," was conducted during the 1994-95 school year and is featured in this report.

On-going Grant Funding

We continue to raise money so that our basis for supporting teachers who conduct classroom research continues to be strong. CCLD has been designated as a tax-deductible, non-profit organization. Contributions are always welcome and may be written out to the Colorado Council for Learning Disabilities and sent to the Research Committee Chairperson. Supporting classroom researchers contributes to the welfare of teachers and to their students with learning disabilities.

1994-95 Project Summaries

The summaries that follow are of projects conducted during the 1994-95 school year by teachers just like you. They have provided final reports of their work so that the field is enriched by it. We hope that their work inspires you to develop and implement a research project that will help solve some of the very difficult problems of practice in your school. We invite you to call on these researchers and on the CCLD Research Committee to explore your idea before submitting a proposal. We are glad to help you think your project through. We'll offer advice on how to make your project strong and your porposal reflect that strength.

Nancy K. French, Ph.D.
CCLD Research Committee Chairperson
P.O. Box 562, 1200 Madison St.
Denver, CO 80206

Research in the Classroom
9th Annual Report

This ninth report on research in the classroom contains some interesting and very positive summaries from creative educators across the state!

The first report by Randee Bergen presents information about the use of literature with controlled vocabulary to improve students' ability to recognize high frequency words. It provides considerations to help teachers decide when to use controlled vocabulary.

Next the team of Robin Bruce, Reddy Gentry, Frances Hopp and Beverley Temple report on a project to educate parents about how to help their students with learning disabilities. Evaluation showed that there was a considerable gain in knowledge in the areas of advocating for one's child, homework strategies, organizational strategies, time management and study skills. Parents who participated in the group sessions expressed an interest and support for continuing the group.

A hands-on science class is described and evaluated by Judith Bulmer. Results of using hands-on science experiments indicate it helps students acquire vocabulary and reading skills.

Fairview High School teachers, Joyce Fuller, Stan Jozsiak, DeAnna Wesley, Mike Stanley and Patty Smith, report on a multimedia portfolio project that focused on academic content and targeted learning and transition skills. They found that students needed help associating assignments with transition skills. The researcher-teachers also found that they had to continually verbalize the relationships of skills to be learned and the assignments being given. This is helpful information for us all as we develop strategies to combine standards and transition goals.

Finally, Tracy Zimmerman, Rona Finnin and Marcia Readsecker write about their research using an expository writing strategy approach to teach students writing skills in the regular classroom. The results of their efforts are very promising.

The five research projects described in this report demonstrate that teacher initiated classroom based research allows educators to develop innovative approaches to instruction and to analyze their results in an objective way. Hopefully, this leads to improved instructional practices. From the research presented in this book, it appears that it also leads to more creative teaching. With that in mind, won't you consider applying for a grant this year? There's an application at the end of this book.

Lois Adams, Consultant
Colorado Department of Education
Special Education Services Unit

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February, 1966

Title: Using Classic Literature with a Controlled Vocabulary to Improve Students' Ability to Recognize Frequency Words

Researcher: Randee Bergen
179 Harrison Street
Denver, CO 80206

School: Centennial Elementary School
3306 West Berry Avenue
Littleton, CO 80123

Statement of Problem: There are two types of readers who are ready to move from the emergent stage of reading development to the transitional stage of reading development. The first type of reader uses some content based strategies to decode words, but also relies on his/her sight vocabulary to read words he/she automatically knows. The other type of reader extensively employs strategies that are meaning-based and has not experienced the need for (and therefore hasn't developed) a base of known words. This second type of reader has a greater difficulty moving from the emergent stage of reading to the transitional stage of reading.

Objective: To determine if the temporary concentrated use of books with a controlled vocabulary improve learning disabled students' ability to recognize high frequency words.

Population: Six second grade boys and one third grade boy identified as being learning disabled were involved in the project from the beginning. The students chosen to participate demonstrated characteristics of the second type of reader mentioned above--those who extensively employ strategies that are meaning-based and have not experienced the need for and therefore have not developed a base of known words. The third grade student and one second grade student moved during the course of the research. Post-assessment data was available for five students.

Assessment: A list of the 100 most frequently used words in the English language was used as an assessment tool. Students were asked to read as many of the words as they could. The students tested in August 1994 and December 1994 and posttested in May 1995. The list is attached.

Procedure: The research began in January 1995. The books which were purchased were ordered according to difficulty of the reading level. Based on pretest data, the students were assigned a starting point somewhere in the list of books. Students read one of the special books chosen for this research every Monday during readers' workshop and then reread the book on Tuesday. They took the book home on Monday night and were expected to read some or all of the book with a family member. Students progressed to the next more difficult book each Monday and continued with this until they had read each book or until the beginning of May, whichever came first.

Evaluation: Students were asked to read as many words as they could from the list of 100 High Frequency Words in early May 1995. The list is attached. The growth between August 1994 and December 1994 when the students were not being asked to read the books with the controlled vocabulary was compared with the growth between January 1995 and May 1995 when the students were reading the books with the controlled vocabulary.

Findings: The results are shown below.

Student	Percentage of Words Recognized and Read: August	December	May	Difference from Aug. to Dec.	Difference from Jan. to May
#1	57	79	95	22	16
#2	36	62	88	26	26
#3	12	35	74	23	39
#4	59	86	91	27	5
#5	8	30	61	22	31

The results show that two of the five students (40%) made more growth in the number of words they could recognize and read between the months of August and December when they were choosing any book at their level to read during readers' workshop. They made less growth between January and May when they were required to read the books with the controlled vocabulary every Monday and Tuesday.

Two of the five students (40%) made more growth in the number of words they could recognize and read between the months of January and May when they were required to read the books with the controlled vocabulary every Monday and Tuesday during readers' workshop. They made less growth between August and December when they were choosing any book at their level to read.

One students showed equal growth between the two time periods.

Implications: Based on the assessment results and observations made during the course of the research, books with a controlled vocabulary such as the ones used for this study may be helpful in increasing the number of words students can automatically recognize and read. It is imperative that students be introduced to the books at a crucial point in their reading development and that they be allowed to progress through the series of books at their own individual pace. In other words, not all students should have begun this project at the same time and not all students should have been asked to read each book two times or only two times. It seems the best time to have students start reading the easiest of these books is when they know approximately 35 basic sight words. If students know more than 60 basic sight words, these books may not be appropriate for them due to the fact that they are developmentally ready to read books without controlled vocabularies. If student interest exists, students should be allowed to read each book in the series as many times as necessary until they can recognize and read most of the words in the book or until they appear to be memorizing the book. Then the students should be asked to move to the next book in the series. Students may need more than one day to read the longer books.

Expenditures: Two each of the following books were purchased. The cost per book was $6.99. The books are listed in order from easiest to most difficult based on their vocabulary, concepts and length.

The Eye Book by Theo. LeSieg
Hop on Pop by Dr. Seuss
It's Not Easy Being a Bunny by Marilyn Sadler
Put Me in the Zoo by Robert Lopshire
Go, Dog, Go by P.D. Eastman
Snow by Roy McKee and P.D. Eastman
Are You My Mother? by P.D. Eastman
A Fish Out of Water by Helen Palmer
Robert the Rose Horse by Joan Heilbroner
Green Eggs and Ham by Dr. Seuss
A Big Ball of String by Marion Holland
A Fly Went By by Mike McClintock
One Fish, Two Fish, Red Fish, Blue Fish
The Cat in the Hat by Dr. Seuss

Title: B.U.I.L.D.: Better Understanding and Interest in Learning Disabilities: Parent Support Group.

Researchers: Robin Bruce, Reddy Gentry, Frances Hopp, Beverley Temple
Special Educators - Cherry Creek School District

Schools: Participating schools were Southeast area middle and elementary schools that transition students into Smoky Hill and Eaglecrest High Schools. Schools included: Horizon Community and Laredo Middle Schools, Cimarron, Creekside, Independence, Indian Ridge, Meadow Point, and Timberline Elementary Schools.

Statement of the Problem: Following the 1993-94 pilot model of the BUILD parent support group, parents expressed interest in continuing a support group, where they would be able to air their concerns, receive information, and share ideas to help with future problem-solving as it relates to parenting a child with a learning disability.

Objectives:

1. To build better understanding and interest in learning disabilities.

2. To provide parent education by effectively establishing a collaborative parent/school network.

3. To promote academic achievement by providing strategies for encouragng parent advocacy, child self-advocacy, parent/child dialogue, organization, homework, supervision, study skills, and time management.

Population: The target population for this study was students with learning disabilities, their parents, guardians, advocates, teachers and school support staff. The schools involved are located in Cherry Creek School District #5.

Assessment: Survey forms were handed out at the first and last meetings of the year. The first survey form was used to further define the information sought by parents. The final survey form was used to determine how much parents learned about L. D. issues this year and how much they valued the group.

Procedure: A one and one-half hour meeting was scheduled in November, January and February. Topics for discussion at the three meetings were based on selections from parent questionnaires which were handed out during the 1993-1994 pilot program. Flyers were used to advertise meetings.

Meeting #1: The November session covered homework, organization, and time management. Topics included: using an assignment notebook, a weekly progress report, a binder with dividers, and appropriate carry-all, as well as developing an at-home routine and location for getting homework completed and returned to school.

Time management strategies included utilizing a 24 hour daily calendar to schedule before, during, and after school academic and extra-curricular activities. Ideas on how to plan and segment long term projects were also covered. Numerous hand-outs were provided for insertion in the participants' manual.

Integral to the meeting was the establishment of a parent network. Parents were invited to submit their name, child's grade, school of attendance, and home phone numbers which were published in a BUILD directory.

Meeting #2: The January meeting was dedicated to study strategies and techniques for learning. Parents and students together were instructed in primary grade activities for reading readiness, games to reinforce learning, as well as strategies for reading, writing, and spelling at all grade levels. Final areas presented comprised listening skills and note taking.

Meeting #3: During the final meeting an interdisciplinary team, including a general education teacher, a parent, a psychologist, a learning disabilities resource teacher, a social worker and a speech language clinician facilitated a panel discussion on current issues of parent advocacy and child self-advocacy. Parent advocacy issues included parental rights, recognition of a child's learning style, and strategies for working collaboratively with teachers to address a child's needs. Child self-advocacy issues included self-awareness of strengths and needs, requesting assignment and test modification, and asking for adjustments in teaching methods. An advance organizer to facilitate participation and note-taking during the panel discussion was given to parents at the beginning of the session.

Evaluation: Surveys were handed out at the first and last meetings. Parents were asked how much knowledge they had on various topics. Results from pre and post surveys showed that there was considerable gain (50%-70%) in knowledge in the areas of advocating for one's child, homework strategies, organizational strategies, time management an study skills. Moderate gains (5%-26%) were shown in parental understanding of collaborative networking between parents, collaborative networking between parents and school, parent-child communication, and children as self-advocates.

Informal discussions with parents provided the BUILD team with positive feedback. Parents expressed ongoing success and knowledge in feeling better equipped to help their children with homework assignments and study skills organization. A number of parents voiced appreciation for the many ideas and handouts provided. Generally speaking, parents felt they were still having continued success as coaches for their children. A notebook of strategies, as well as discussions during meetings, were keys to providing the help that would last as a reference throughout a student's school years.

Implications: Parents who participated in the BUILD group expressed much interest and support for this type of group. They expressed that the resource/idea notebook which was distributed to each of them was a valuable tool. Meeting as a collaborative group of teachers and parents clearly encouraged parents to have the confidence and support to continue striving to meet the emotional and academic needs of their children.

The future goal for the BUILD group would be that a core group of parents design and initiate meetings with resource support from LD teachers.

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Actual Monetary Costs

Name tages	4.50
Bold color paper for the flyers	45.97
BUILD Directory	5.00
Participant Manual - 3 ring binders for handouts	78.30
Copy expenses for participant manual	358.62
Refreshments	25.39
Limited postage	45.00
Total	$562.78

*Parents donated $50.00 to the cost of printing. In addition, each participating school was to contribute $21.91 from their resource budgets to cover the shortfall in funds.

Title: Increasing Reading, Language, Math, and Writing Skills Through Hands-On Science.

Researcher: Judith Bulmer, Special Education Teacher

School: Western Hills Elementary School
7700 Delta
Denver, CO 80221
(303) 429-1714

Statement of the Problem: Children learn what they do. When students are provided an experience upon which to learn new concepts and extend vocabulary and language use, they integrate new information more easily into their repertoire of knowledge. Research was needed to determine if Hands-on Science is the experiential strategy to increase reading, language, math and writing skills.

Objective: To provide students with connections between new information and their own experiences by using science activities, and to create personal meaning for children by integrating science activities into teaching of reading, math and language.

Population: Five first grade and five kindergarten students identified as having learning disabilities and twenty-four first grade students with no special education identification participated in the project.

Assessment: All learning disabled students were pre- and post- tested using the Bankston Language Test and Expressive and Receptive One-Word Picture Vocabulary Tests. All students were pre- and post-tested on teacher made tests for reading and word meaning on vocabulary related to each science unit.

Procedure: Research was begun in spring of 1994 by examining science and language materials and piloting some of the materials and activities with learning disabled students in an inclusion setting. Based on this preliminary research, the units of weather, seeds and weeds, and water and ice were decided upon. Science experiments relating to these three units were chosen based on the level of the students, the amount of student involvement, and the amount of time each experiment took. Science experiments were conducted in the morning in a resource setting with five special education students and twelve students from the participating grade one classroom. Follow up reading, math and language activities were designed based on student needs. The afternoon group consisted of five special education students and twelve students from the participating classroom. They did the same activities as the morning but without benefit of the science activities. A whole language, literature based approach, with the literature relating to the science, was used for both groups. The use of the resource setting allowed for small group instruction, active learning, reduction of attention problems, immediate feedback to students, and motivated learners.

Evaluation: In addition to the pre-and post-testing, daily logs of science activities and records of correlating literature presented. Vocabulary and language concepts taught were kept. Student responses and problem solving strategies were recorded. Progress summaries were compiled each nine weeks. Math and written language samples were evaluated based on student's individual goals.

Findings: Analysis of pre-post test data shows greater progress by the students who used the science experiments as part of their vocabulary/reading. Letter and word recognition and word meaning skills for the morning special education students were about two times more successful.

Math skills of measurement and money (due to selling what they grew in the seeds and seeds unit) were also more successful in the morning group. The slower and special education students benefited most except in the written language area, where the advanced students gained in the area of written language. Evidence indicated that the science experiments were motivation devices and gave all children a "hook" to remember vocabulary and reading words.

Implications: Time to plan the units was hard, but working together contributed to consistency. Adults needed to be committed to science projects and coordinating curriculum with them. All students involved maintained enthusiasm and motivation throughout the year. Social skills were developed by all students. Special education students showed growth in all areas. Science activities provided students with an experiential foundation upon which words take on meaning. The findings support having high expectations for special education students and their ability to understand abstract concepts.

I really enjoyed working on this project. The students remembered so much information for the whole school year. They would talk about September experiments and the results in the spring as we were ready to do new activities. Kindergarten students consistently used difficult vocabulary appropriately.

Written language for learning disabled students improved dramatically. They simply couldn't write sentences or stories until we did the experiments and discussed sequences, vocabulary, results, and what they know. They then could put that information coherently on paper.

The seeds and weeds unit turned out to be the most fun. The students grew radishes, onions and carrots in the root vue farm and sold them to the teachers for pennies and nickels.

The students had to "keep the books" and decide how to continue growing. The money was reinvested in more seeds, and so it went. We tried to grow dandelions and thistle also. At the end of the year the children took the last vegetables home. We even had kindergarten students who could "read" some of the literature books: Growing Vegetable Soup.

We were able to coordinate our water and ice unit with the school wide unit of Under The Sea. The entire first grade ended up being part of this unit because we did a rotation schedule with all first graders.

The really difficult part was planning as a group. Some teachers were really reluctant to do anything with science that was messy. Vinegar and baking soda, chemistry and emulsions were great for the students, but all adults didn't want to be involved. Meeting to compile weekly and monthly progress reports was a little easier because we could divide up the work. Organizing the science experiments and getting supplies took a lot of time and effort, especially trying to get parents involved. The same parents continued to volunteer and it was hard to interest new people.

Overall this project was successful because our building has no science curriculum. This will not be the same in the future because a science curriculum has been adopted.

This project was presented to elementary teachers district wide.

Title: STAND BY THE BEST: Use of Multimedia Portfolio As Assessment of Content and Transition Skills

Researchers: Joyce Fuller, Stan Jozsiak, DeAnna Wesley, Mike Stanley and Patty Smith

School: Fairview High School
1515 Greenbriar Blvd.
Boulder, CO 80303

Statement of Problem: There is a need to develop strategies to increase transition skills for special needs students and to measure skills using academic types of assessments.

Objectives:

(1) To design multimedia content activities which address goals stated by World Summit for Children: America 2000 Goals: Graduation rate will increase to 90% and every adult American will be literate and possess knowledge and skills necessary to compete and excercise rights.

(2) To design multimedia assessment strategies for portfolio use which are successful in developing competencies within the regular classroom content areas. The five competencies include.

1. Resources: Identifies, organizes, plans and allocates resources.
2. Interpersonal: Works with others: participates, teaches, serves, exercises leadership, negotiates and works with diversity.
3. Information: Acquires and evaluates, organizes and maintains, interprets and communicates, uses computers to process.
4. Systems: Understands complex inter-relationships, understands systems, monitors and corrects performance, improves or designs systems.
5. Technology: Works with a variety of technologies: selects technology, applies and maintains and troubleshoots equipment.

Population: Students enrolled in three 10th grade collaboratively taught world studies classes are the focus of this study. Approximately 35% of these students are identified as moderate needs special education. Students enrolled in 10th grade collaborative biology and language arts classes are also completing portfolios although some of these students overlap. Four learning lab teachers encourgaged transition portofolios within the learning lab classes thus supporting this idea from the three content classes. One class of 12 students in a world studies class served as a control group. This group did not have portfolios as a focus within this class. There is little specific discussion about specific transition skills or use of technology.

Assessment: Pre/post questionnaires were administered to students enrolled in world studies classes. Questionnaires were sent home to parents.

Procedure: Students were instructed at the beginning of the 1994-95 school year regarding the development of Multimedia portfolios as a portion of their grade within the world studies class. Handouts were given to students with suggestions of activities which could be developed within the portfolio; also, a description of the targeted competencies was given out. The focus was to increase skills within the following areas:

A. Resources: ability to identify, organize, plan and utilize resources.
B. Interpersonal: ability to work with others, teach others, exercise leadership, negotiate agreements, handle diverse situations in a positive manner.
C. Information: ability to acquire, organize, interpret, maintain, communicate and retrieve information.
D. Systems: ability to understand complex inter-relationships, linking process in both social and interdisciplinary areas.
E. Technology: ability to select and utilize a variety of technologies, ability to maintain and trouble shoot equipment.

A portfolio filing system was devised within the classroom. All assignments were kept within the portfolio file. Students were responsible for recording assignments as they were graded and to organize their portfolio to include initial notes, drafts and final papers. A Table of Contents sheet reflected possible points and actual points for each assignment. Redo assignments were also allowed and those assignments were filed and recorded periodically. Many of the students also kept all work recorded on a disk which became a part of their portfolio. Students were encouraged to utilize various technology and media in order to gain competencies in technology and research. Student Internet accounts were available through this class. A list of suggested activities was given to the students as well as being posted. Various possible activities were discussed as the class progressed.

Technology was made available within the science lab, library and three learning labs. No computer was avilable to students within the social studies department.

Assignments were developed which would encourage the development of the targeted competencies. Among these were:

A. Family Budget Project - construct a menu/food menu budget for one week (21 meals).
B. European Travel Project
C. Cultural Geography: Locating a Metal Fabrication Plant in the Soviet Unin.
D. Participate in the History Day competition.
E. World Studies Current Affairs
F. Front Page of a Chinese Newspaper
G. Socratic Seminars-16

Changes: Several changes occurred during the time period of this project. Some of these changes were due to circumstances beyond the control of the researcher. There were budget cuts which brought about class changes and the team teaching opportunities were not as extensive as previously planned due to teaching schedules. The enrollment of identified needs students within the classes also changed. Under the original design, two social studies classes were to have been experimental and one class was to have been the control group. Because of the numbers of identified needs students within each class, teaming took place equally in each class. Portfolios were kept in three classes. Only 12 students were enrolled in the class in which little collaboration and no focus on portfolios took place.

Evaluation: Pre/post questionnaires were administered to students regarding their competencies as related to the above listing. Activities and assignments were designed to include development of such skills. A questionnaire was sent home at the beginning of the year regarding strengths and goals. This was to have been completed by parent and student together. Student expectations included the completion of the CONTENTS SHEET and to be aware at all times of their current status within the world studies class.

Questionnaires "Some Thoughts About What I'd Like to Do After Graduation" were also given to learning lab students as part of the development of portfolio within learning lab. Assignments in learning lab included the following:

1. Harrington O'Shea Interest Inventory
2. Exploration of careers through computer

Title: Expository Writing Curriculum for Students with Learning Disabilities

Researcher: Tracy Zimmerman, Rona Finnin and Marcia Reaksecker

School: Denver Public Schools
McMeen Elementary School
1000 S Holly
Denver, CO 80222

Statement of Problem: There is a need to improve written language skills of Learning Disabled students at McMeen Elementary. When reviewing these students' Broad Written Language Scores from the Woodcock-Johnson Educational Battery, it was discovered that each student performed approximately one year below grade level.

Objective: The Expository Writing Curriculum is a systematic approach to writing which utilizes numerous pre-writing and organizational strategies. The goal is to introduce the Expository Writing strategies to Learning Disabled students and others who are struggling prior to the strategies' introduction in the regular classroom. Once these selected students are in their classroom, they will be assisted to implement the strategies in that setting.

Procedure:

1. All third grade teachers at McMeen have completed the Expository Writing and Content Reading Strategies course taught by Maureen Auman through Colorado State University.
2. All third grade teachers began using the curriculum in the fall of 1993 to acquaint themselves with the material.
3. All third grade classrooms at McMeen are currently using the inclusionary delivery model to meet the needs of the identified Learning Disabled students.
4. All third grade teachers at McMeen have attempted student led conferences with 75% of students and parents attending.

Plans for Evaluation

1. Daily observations of student's ability to complete written work.
2. Weekly team planning to discuss progress, activities, materials and modifications needed for third graders.
3. Utilization of a student editing check list to evaluate students' own writing. The check list will help students identify appropriate grammar, content and organization.
4. Maintaining student portfolios containing samples of the students' writing throughout the year. The portfolio will contain a spiral notebook used for rough drafts, completed editing check lists and final copies of the students' writing.
5. Student led conferences twice during the 94-95 school year.
6. Student participation in the staffing process for placements, annual reviews or triennials.
7. End of the year comparison of pre- and post-test results using the Test of Written Language Second Edition (TOWL-2) and portfolios.

Population: There were two third grade classrooms which participated in this research project. The population consisted of Learning Disabled and regular students. In room 110, the identified Learning Disabilities students had reading and written language goals and objectives specified on their Individual Education Plan. In room 105, the identified Learning Disabilities students had reading, written language and math specified on their IEP. In each class there was some mobility through the year. Thirteen students remained in room 110 during the research and fourteen in room 105. Both classrooms averaged a daily enrollment of twenty-two. In room 110 there were five identified special education students that remained the entire year, all of whom had Learning Disabilities. In room 105, there were nine identified special education students that remained the entire year, six with Learning Disabilities, one with Physical Disabilities, one identified as Educable Mentally Handicapped and one with Emotional Disabilities.

McMeen Elementary is a Denver Public School located in southeast Denver which is currently paired with Smith Elementary in Northeast Denver. All kindergartners attend their home school, grades one and two attend Smith and grades three, four and five attend McMeen. The Smith area is impacted with gang activity and many students are "at risk".

Intervention: The Expository Writing and Content Reading Strategies organizes writing and reading into a sequence of skills which are concrete and easy to follow. The **first step** involves some type of **research**: interviews, brainstorming or highlighting a passage. The **next step** organizes the information attained into **two-column notes**. Following the organization, the student **writes sentences** using the information gathered. For some students this step was bypassed and a **framed paragraph** was used. Generally, the students and the teacher verbally created the framed paragraph and then the students independently filled in the framed paragraph. A **rough draft** of the sentences is then written on notebook paper or into the student spiral notebook. Finally, a **final copy** was written on notebook paper or typed on the computer. The class room teachers utilized these techniques across the curriculum when a written assignment was given, notes were taken or while reading a passage.

At the beginning of the year, all of the identified special education students were introduced to these techniques prior to whole class instruction. Most of the students required direct teacher support through the first two to four writing assignments. Most students were able to complete the process independently by second semester. The Physically Disabled student and the Educable Mentally Handicapped student never mastered the process along with one young, immature, low functioning Learning Disabled student.

During the year, we were also fortunate to have a psychologist volunteer to work with our students. She introduced us and the students to neuro-linguistic programming. These strategies compliment the expository writing techniques quite well. The strategies involve visualization, self-esteem building and incorporating all modalities into students' learning.

Data Tabulation: The Test of Written Language was administered in its entirety during the second week of September following the specified procedures in the manual. The test components are designed to measure contrived writing and contextual writing. The contrived writing subtests include: Vocabulary, Spelling, Style, Logical Sentences and Sentence Combining. The contextual writing subtest scores are attained from a writing sample and they include: Thematic Maturity, Contextual Vocabulary, Syntactic Maturity, Contextual Spelling and Contextual Style

The post test was administered in the second week of April. We determined after administering the pre-test that the contrived writing Vocabulary, Logical Sentences and Sentence Combining relied heavily on the reading ability of a student and did not administer these subtests as part of the post test. We also decided to have students use the process before completing the writing sample, two-column notes and the Power Paragraph page. We felt that if writing is being taught as a process, it should be assessed that way also.

Results: Overall, in both classrooms, the students had higher percentile scores on the post-test! On the contrived subtest of style, the regular students averaged a 34%tile point gain and the special education students averaged a 24%tile point gain. On the contrived subtest of spelling, the regular students averaged a 5%tile point loss and the special education students averaged a 3%tile gain.

On the contextual subtests, gains were made in all areas except Contextual Vocabulary. The regular students gained an average of 12%tile points on the Thematic Maturity subtest, 24%tile point gain on the Syntactic Maturity subtest, 22%tile points on the Contextual Spelling subtest, 27%tile points on the Contextual Style subtest and 20%tile points loss on the Contextual Vocabulary subtest. The Special education students gained an average of 18%tile points on the Thematic Maturity subtest, 21%tile points on the Syntactic Maturity subtest, 15%tile points on the Contextual Spelling subtest, 3%tile points on the Contextual Style subtest, and 2%tile loss on the

Contextual Vocabulary subtest. **Clearly,** the expository writing and content reading strategies improved overall performance of regular and special education students. (See tables 1 - 14.)

Implications: As long as these students continue to use the expository writing and content reading strategies, gains will be made in their abilities to write and read. As a school, we need to reinforce what has been taught and learned in third grade using these strategies. The common vocabulary and approach to writing kindergarten through fifth grade would enable students to become much more proficient writers and readers.

In addition to the statistical gains already mentioned, students' independent skills improved. By the end of the year, most students could independently research, organize and write a short report. Writing was organized for them into a sequence of skills which are concrete and easily followed.

Since the Contextual Vocabulary subtest scores, adjustments need to be considered. All the teachers involved felt we needed to write more creative pieces, use more vocabulary jot prior to writing, and not limit the writing space by using the Power Paragraph after students have mastered writing sentences from two-column notes. We also need to spend more time writing complex sentences as a whole class or small group. Perhaps these alternatives will allow scores to rise in all areas.

Appendix

Special Education Students' Results

Test of Written Language, Second Edition
Contrived Subtests

Table 1

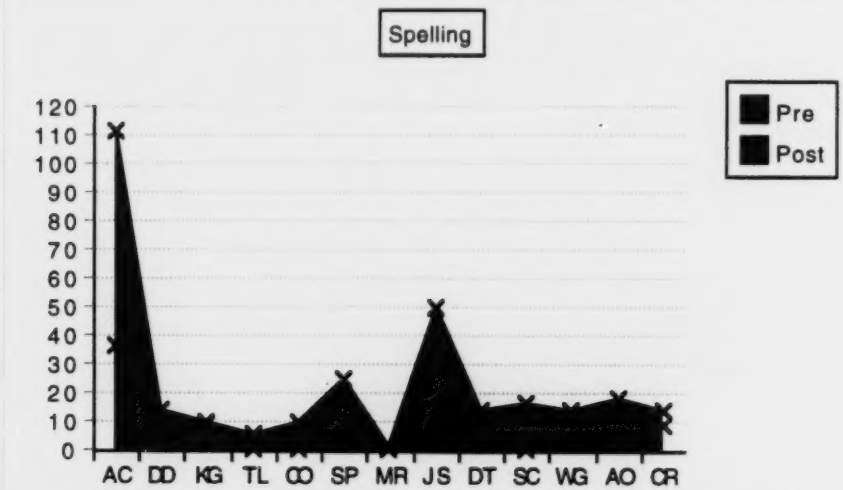
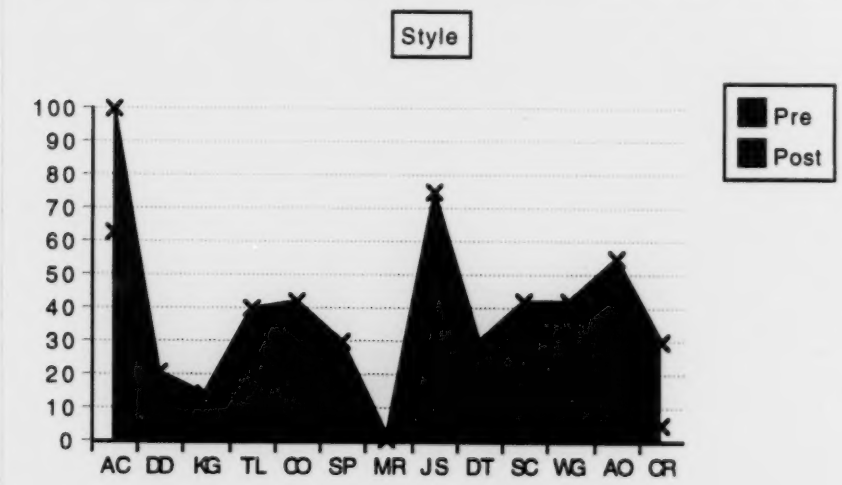


Table 2

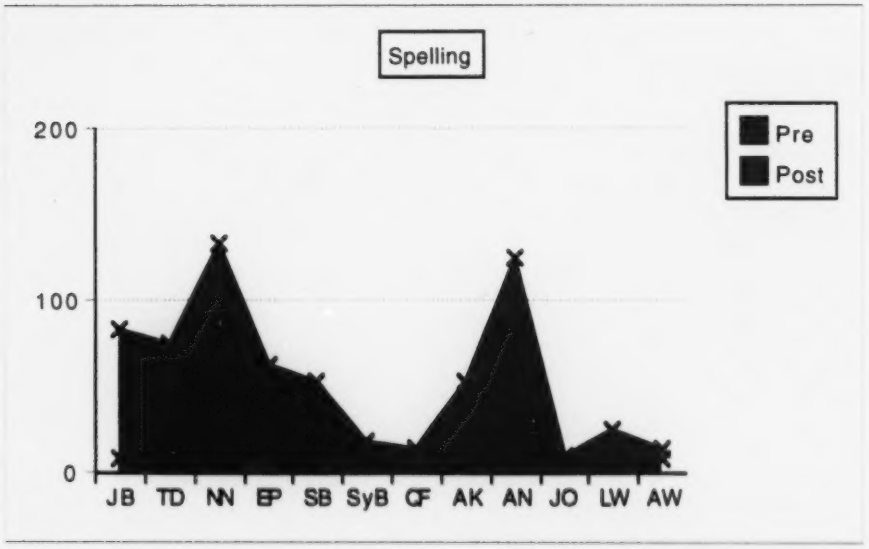


Regular Students' Results

Test of Written Language, Second Edition

Contrived Subtests

Table 3



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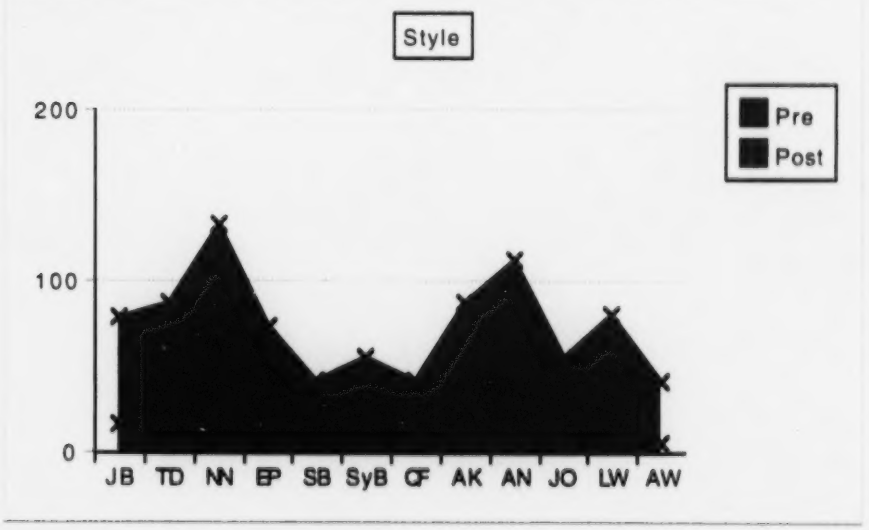
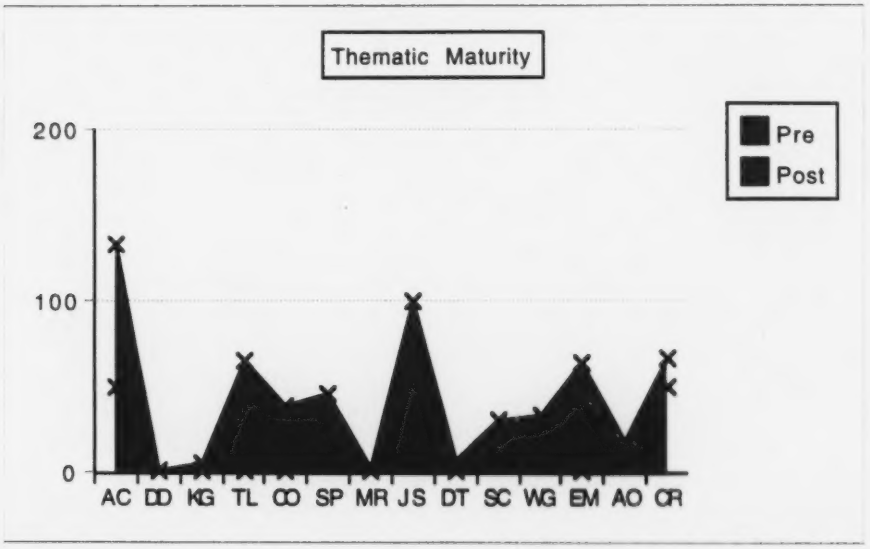


Appendix F

Special Education Students' Results

Test of Written Language, Second Edition
Contextual Subtests

Table 5



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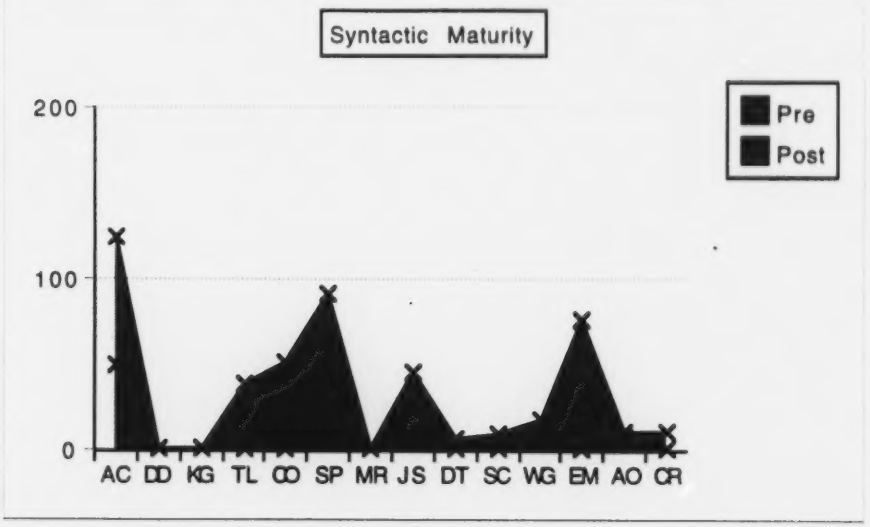

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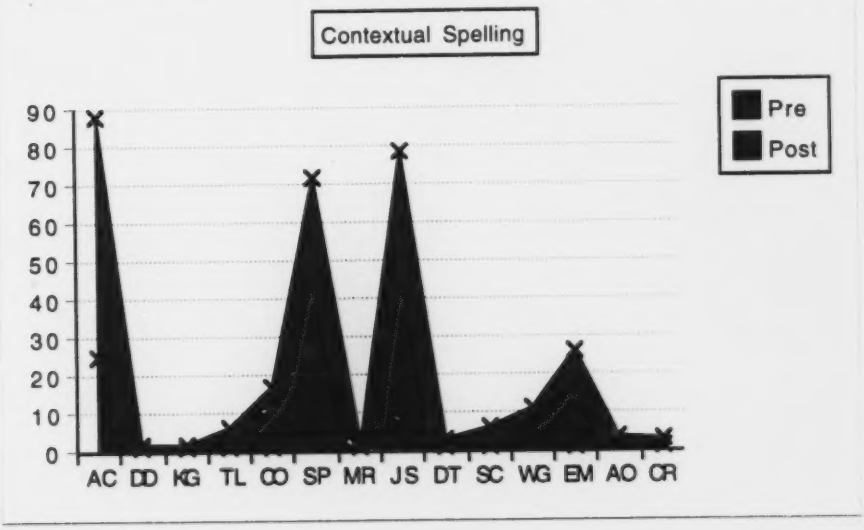

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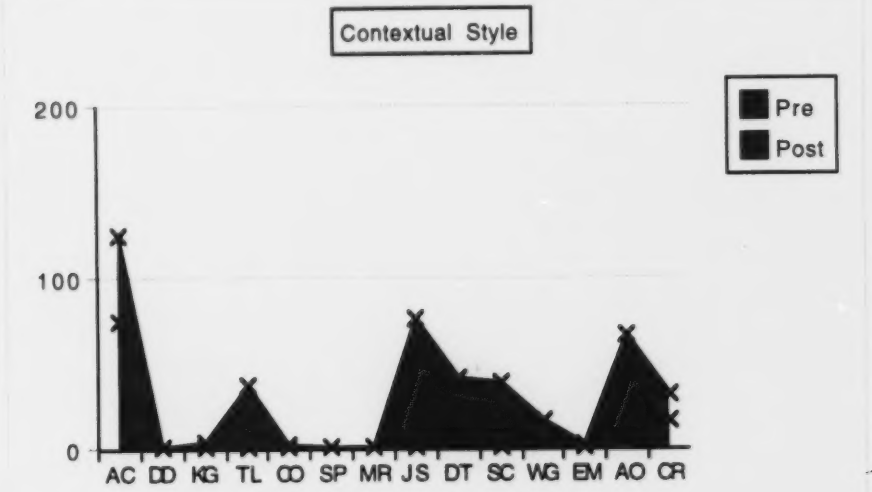

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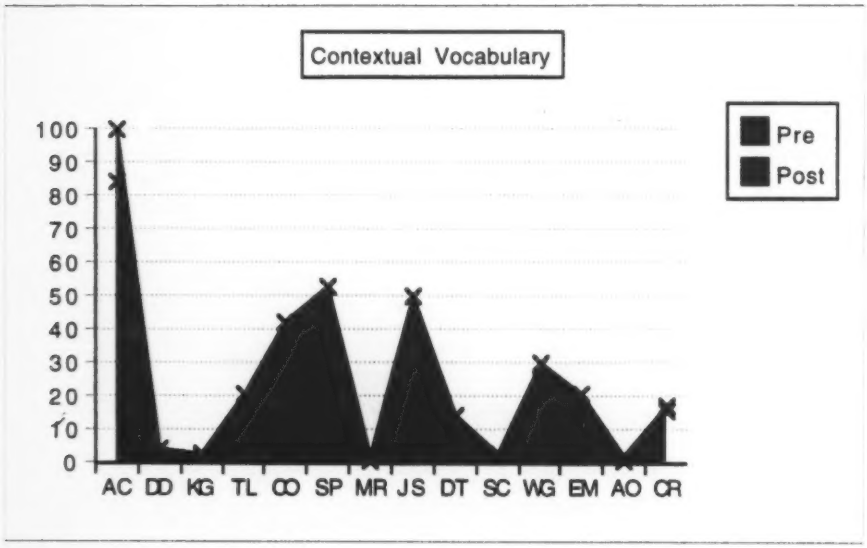
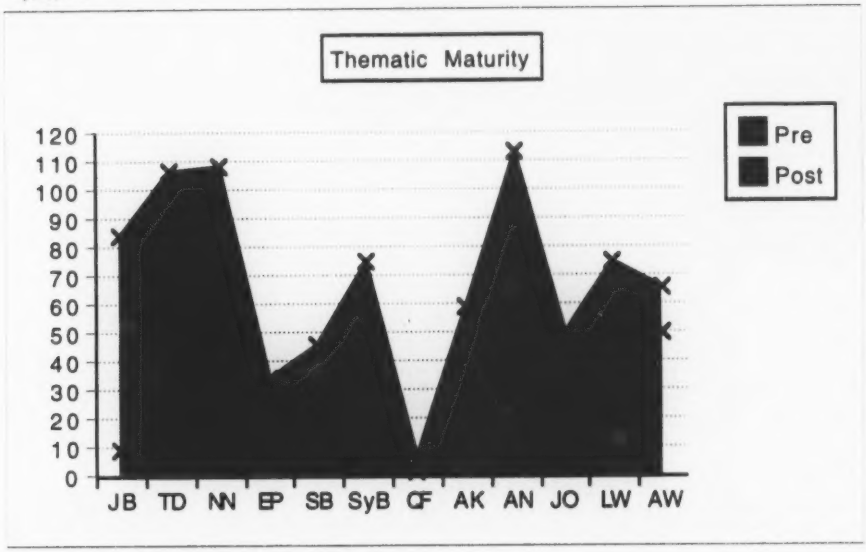

Contextual Vocabulary
Pre
Post
100
90
80
70
60
50
40
30
20
10
0
AC DD KG TL CO SP MR JS DT SC WG EM AO CR

Regular Students' Results

Test of Written Language, Second Edition
Contextual Subtests

Table 10



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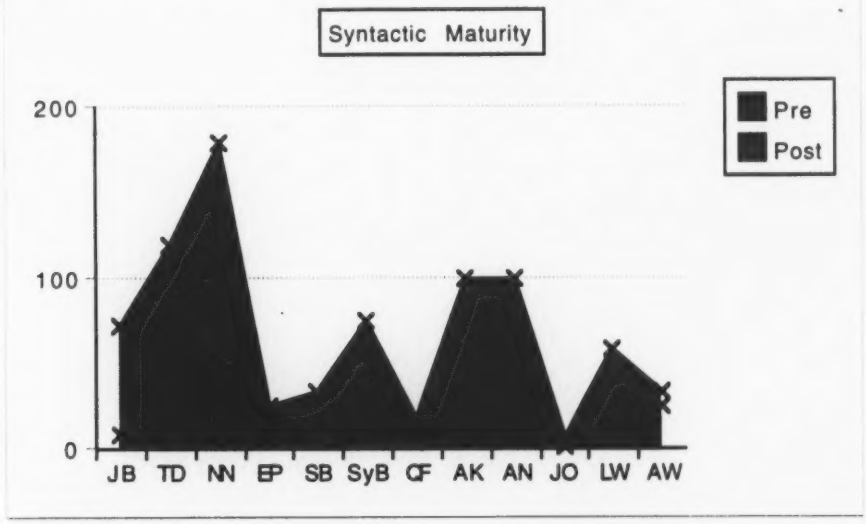

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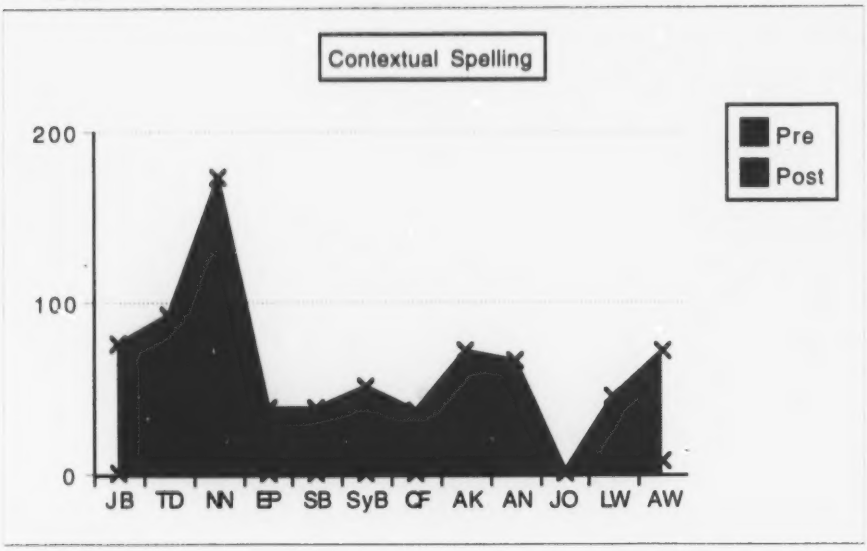

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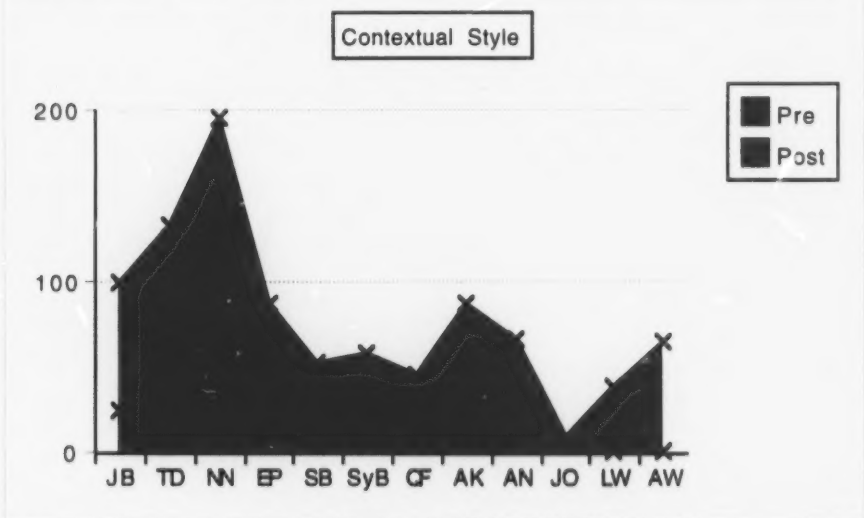

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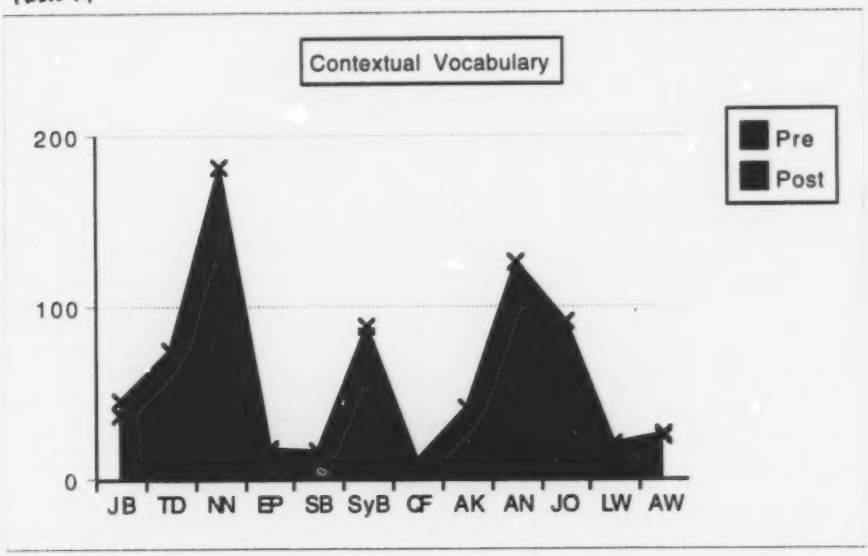
Contextual Vocabulary
Pre
Post
200
100
0
JB
TD
NN
EP
SB
SyB
CF
AK
AN
JO
LW
AW

CCLD Research Committee
P.O. Box 562
1200 Madison St.
Denver, CO 80206

Proposal Cover Sheet and Committee Evaluation Form

Lead Applicant Personal Information: (co-applicant info. included on attached pages)

Name:

Home Address:

City, State, Zip:

Home Phone:

Lead Applicant Professional Information:

School Name:

School Address:

City, State, Zip:

School Phone:

Your Position or Title:

Research Committee Member:_____ **Ratings:**

Proposal Components	Not Present.....Present / Adequate..... High Quality									
Title of Proposal	1	2	3	4	5	6	7	8	9	10
Research Question	1	2	3	4	5	6	7	8	9	10
Rationale	1	2	3	4	5	6	7	8	9	10
Research Design Components a. Population / Sample	1	2	3	4	5	6	7	8	9	10
b. Intervention	1	2	3	4	5	6	7	8	9	10
c. Measurement Tool / Method	1	2	3	4	5	6	7	8	9	10
d. Data Tabulation / Analysis	1	2	3	4	5	6	7	8	9	10
e. Timeline	1	2	3	4	5	6	7	8	9	10
Budget	1	2	3	4	5	6	7	8	9	10
Dissemination Plan	1	2	3	4	5	6	7	8	9	10
References	1	2	3	4	5	6	7	8	9	10
____Funded Amount _____ ____Not Funded	Total Points Assigned by Reader: _____									

CCLD Research Committee
P.O. Box 562
1200 Madison St.
Denver, CO 80206

Format for Midyear (Due: January 31) / Final (Due: June 15) Report

Two reports are required. Midyear and Final Reports should consist of this cover sheet and a two page typed document that contains the information listed in the table in Section II below. Submit both the midyear and the final report to the address above.

Section I:

Lead Researcher Personal Information:

Name:

Home Address:

City, State, Zip:

Home Phone:

Lead Researcher Professional Information:

School Name:

School Address:

City, State, Zip:

School Phone:

Section II:

Report Components	Specific Directions:
Title of Original Proposal	List the original title or explain changes
Original Research Question	List the original question or explain changes
Discussion of Progress a. Population / Sample	Describe the actual subjects of the study, how they were selected.
b. Intervention	Describe the actual intervention. Explain changes from original proposal. List or describe materials relevant to the intervention.
c. Measurements	Tell what measurements you used and how you used them.
d. Data Tabulation / Analysis	Describe how you have tabulated the data. Explain any changes from the original plan.
Results / Findings To Date	Describe findings relevant to the research question. Include charts or tables that summarize the data. Tell what new questions arose through data analysis. Tell what implications you think your research provides for the field.
References	Add new references that were not included in the original proposal if applicable.
Budget	List expenditures to date. Explain changes from original proposed budget.